

Need for Commercial Financing of Infrastructure

WHY Commercial Financing?

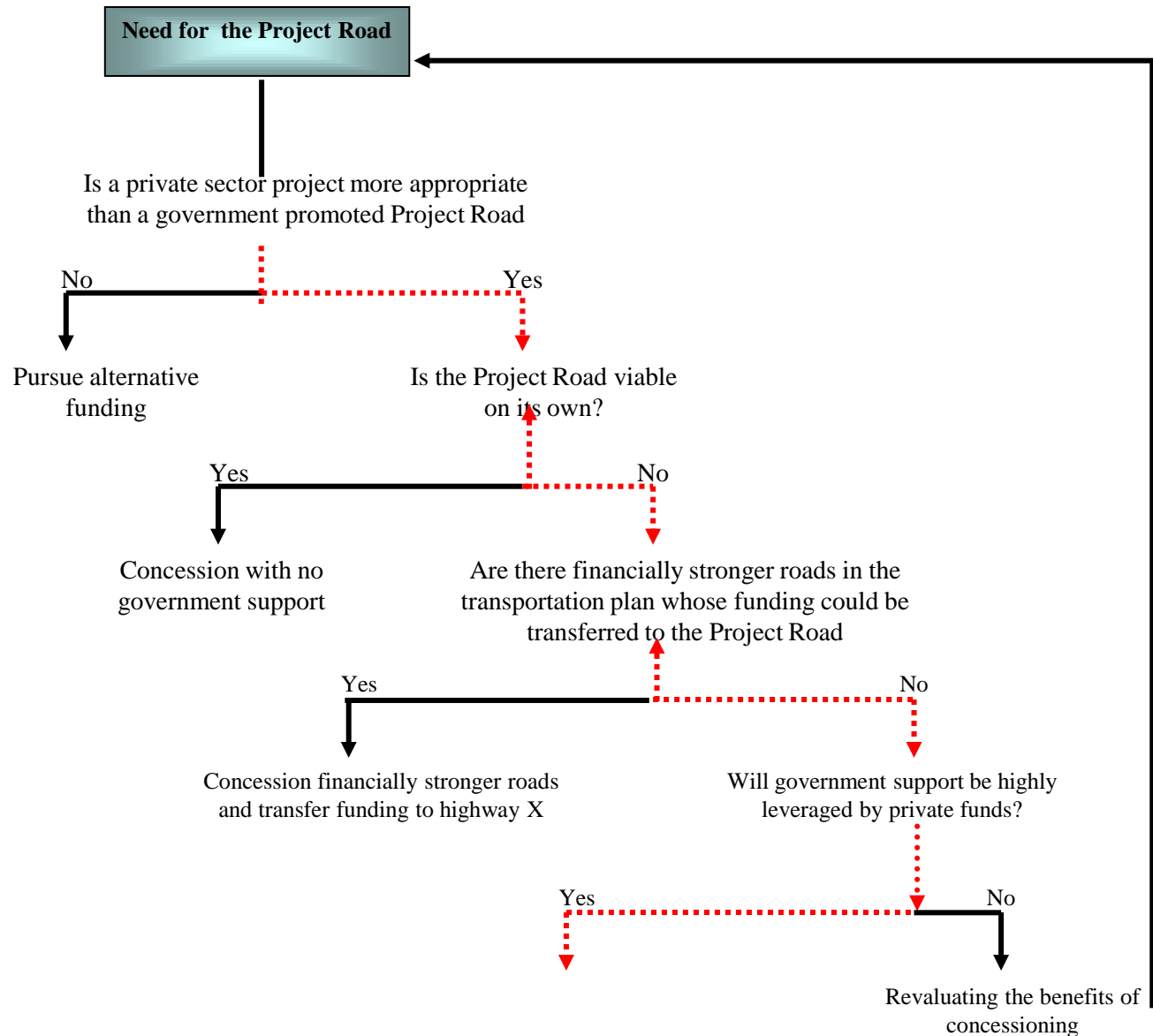
Because There isn't Enough Money!!!

“The belief that private financing is more expensive to the government is untrue. A large number of infrastructure projects languish through years of sub optimal implementation due to lack of funds. This leads to enormous cost overruns and escalation on account of sub optimal and inefficient implementation, growing overheads and inflation. It is essential to remember the opportunity cost of this situation is prohibitive.”

Why Invite Private Sector Partnerships?

- Transfer Construction Risk
- *Transfer Design/Solution Risk*
- Transfer Operations Risk
- Transfer Market Risk
- Transfer Financing Risk
- *Make Subsidies more efficient*

Privatisation Decision Tree





Section II: Early Challenges

Early Challenges

- Regulatory and Institutional
 - Government Policy
 - The lack of an integrated institutional policy and framework for project identification, development and implementation
 - The lack of coordination between various Government agencies involved with road sector projects
 - The prioritization process for project identification based on political reasons rather than economic considerations
 - Regulation
 - The absence of effective and autonomous regulatory authority (at arms' length with Government) to ensure a level playing field for all participants and fair dispute resolution
 - Delays in decisions regarding Government support-both in kind (land for example) and/or investment
 - Multiplicity of Concession Structures
 - Different States followed varied Concession Agreements resulting in concurrent prevalence of various “models”
 - These different structures impeded wider acceptance by the financial institutions, banks and the capital markets

- Project Development
 - Implementation Structures
 - Absence of structures that effectively allocated duties & responsibilities and rewards & penalties amongst all project participants
 - Risk of Revenue Collection and Appropriation
 - Demand Studies
 - Low Willingness to Pay
 - Low Willingness to Charge
 - Potential Risks arising from the social and environmental impacts of the projects
- Financial
 - Limited Experience of Project Financing, Financial Engineering and Risk Assessment
 - Limited Confidence amongst Contractors and Investors to take on risks associated BOT business risks
 - Limited Understanding of the sector and therefore, assignment of highest risk to the projects by the Lenders
 - Non availability of Long Term Debt
 - Negligible Appetite for Project Bonds



Section III : Innovations



Stage I: Project Development

Project Development

- Considering the large investments and risks associated with infrastructure projects, adequate Project Development becomes the most critical phase in project life cycle
- IL&FS developed Best Practices for:
 - Project identification
 - Studies to ascertain Demand and Need
 - Willingness to Pay Surveys
 - Project Conceptualization
 - Environment and Social Aspects
 - Project Structuring
 - Establishment of Feasibility
 - Securing Revenues

Project Development Fund

- One of the key impediments to successful commercialisation of projects in India has been the absence of rigorous project development
- The pre-feasibility reports prepared by the authorities are often inadequate for the bidders/sponsors to raise finances for funding the Project being offered for implementation
- IL&FS recognised the need for a corpus of funds that could help catalyse the Project Development process by bearing the initial expenses and formed the India Project Development Fund
- The India Project Development Fund pools together resources from institutional investors for funding initial project development efforts

Environmental and Social Impact Mitigation

- The Environment and Social Impact Assessment (ESIA) is an important process in the project development effort as an infrastructure facility affects both the environment and the population in the vicinity
- The key objective of ESIA is to delineate measures to minimise the negative environmental and social impact and enhance the positive impact
- Best Practices include:
 - Identification and customization of mitigation measures for each impact for each affected group
 - Ensuring that impacts are not borne disproportionately by one group
- Though ESIA costs less are often less than 2% of the total project cost, it is generally not accorded the attention it deserves - but has a significant impact on project sustainability

Vadodara Halol Toll Road

- Vadodara Halol Toll Road Limited (VHTRL) undertook a voluntary relocation of temples, schools, and environmental infrastructure
 - VHTRL implemented the covenants of the Environmental and Social Management Plan by
 - Creating wetlands
 - Ensuring compliance with emission norms
 - Restricting hazards to neighborhood communities
 - As part of social rehabilitation measures
 - VHTRL paid out rehabilitation assistance to compensate for the difference between the government notified acquisition price and the market price
 - VHTRL created additional facilities such as pedestrian subways, compound walls and provided additional houses for relocation of communities



Structure affected by Project Alignment -Vadodara Halol



Resettlement Colony -Vadodara Halol

Delhi NOIDA Toll Bridge

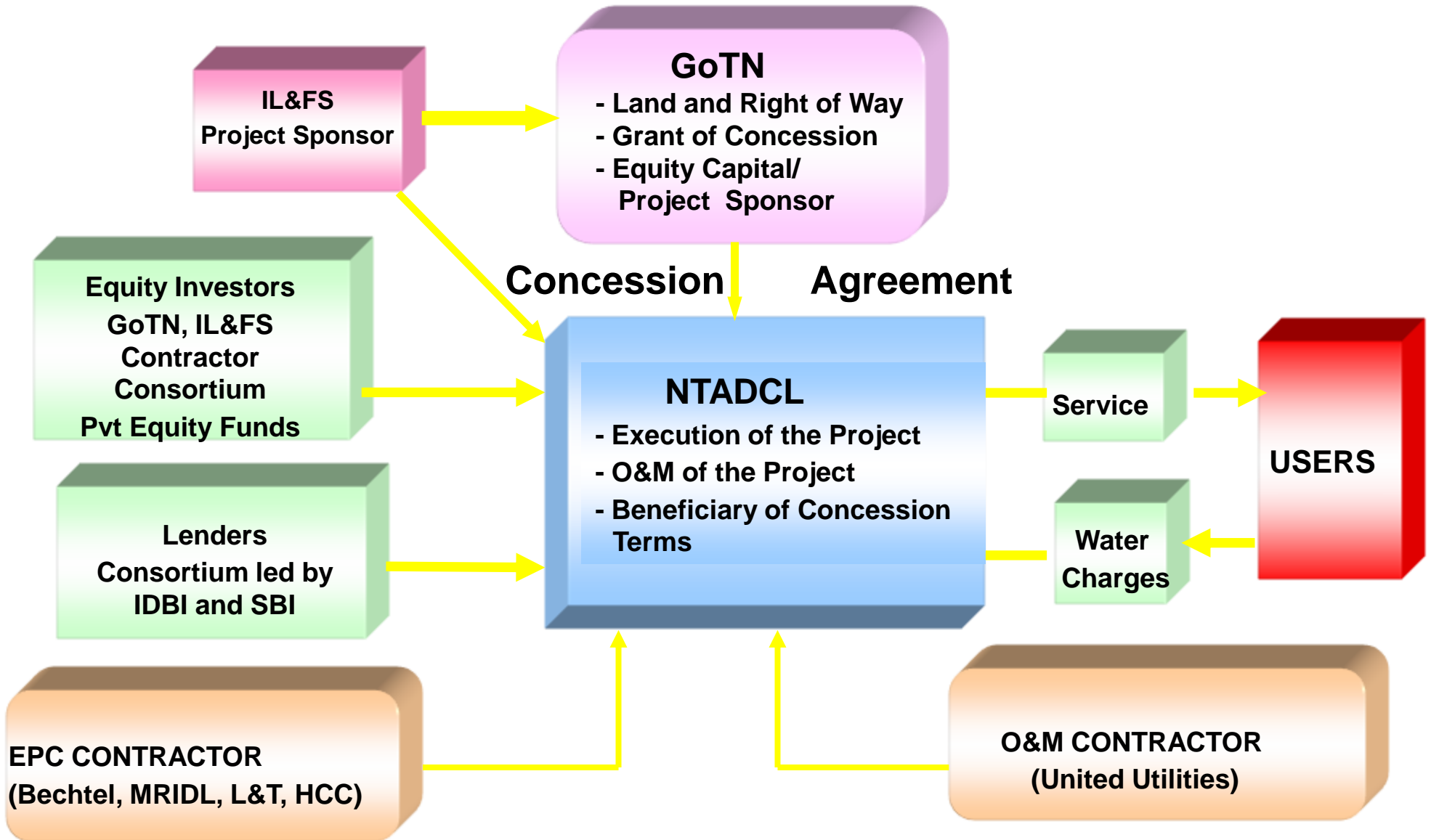
- NOIDA Toll Bridge Company Limited (NTBCL) constituted a Citizens Environment Committee comprising eminent scientists and members of the locality to work with and alleviate the environmental concerns of the citizens
- Construction Practices
 - 7-km long 8-lane expressway built entirely from dredged Yamuna Sand
 - Special technique used involving suctioning silt from the river bed
 - This replaced to an extent the need for fly ash, thus reducing pollution and traffic blockage
 - The solution integrated ecological social issues with technological solutions
- Two NGOs were appointed to implement relief and rehabilitation packages for project affected persons as per World Bank norms
- IL&FS receives 'best practice' recognition in terms of construction practices followed
 - The Project used only dredged river sand, instead of earth fill by road transportation, preventing dust and noise pollution from 700 –800 trucks/day



Project Structuring

- Project Structuring involves
 - Identification of risks
 - Transfer of risk to the party that is best equipped to manage the risk at the lowest cost
 - Development of risk mitigation measures
 - Development of a contractual framework to ensure Project Viability
 - EPC Contract
 - O&M Contract
 - Off take Agreements
 - Fuel Supply Contract
 - Financing Agreements
- Example – Tirupur Area Development
 - Tirupur Area Development Program (TADP) was promoted as a comprehensive solution for meeting the infrastructure requirements of the town
 - An MoU was signed between TACID, TEA, and IL&FS in August 1994 to develop the TADP on a commercial format
 - New Tirupur Area Development Company Limited (NTADCL) was formed as the SPV to implement the TADP
 - A public private partnership approach was adopted, with the following key shareholders
 - Government of India, Government of Tamil Nadu
 - Tirupur Exporters Association
 - Infrastructure Leasing & Financial Services
 - Private Sector Consortium : Bechtel, M&M and United Utilities

The Project Structure



Contractual Structure

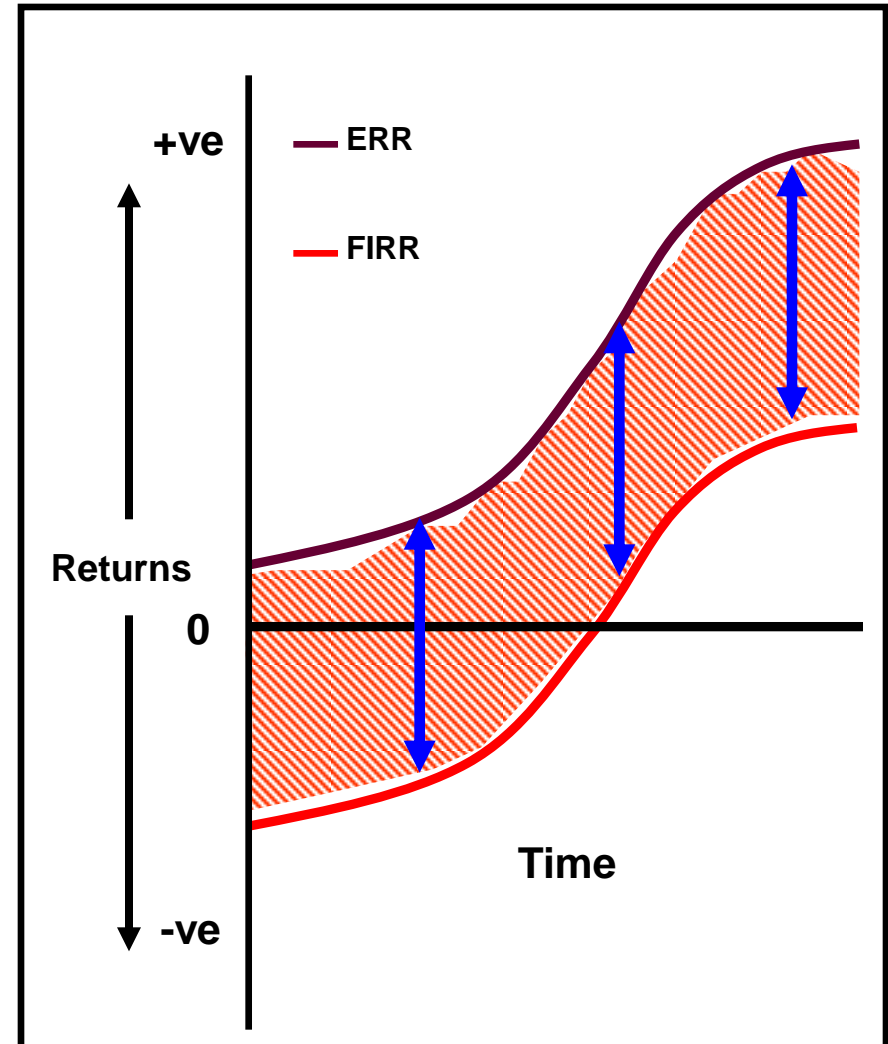
- The EPC Contract
 - The works under EPC Contract were “split” into two contracts
 - The split structure offered reduced taxation obligations by allowing the Contractors to avoid local taxes on equipment and materials purchased from “offshore”
 - The savings resulted in a reduced project capital cost, which was passed onto the Project Company and its lenders
 - EPC 1
 - EPC 1 comprised construction of facilities for pumping raw water up to and including the Main Balancing Reservoir Booster (MBR) pumps
 - A consortium of Bechtel International Inc. and Hindustan Construction Company Limited were appointed as the EPC1 Contractor
 - EPC 2
 - EPC 2 comprised construction of the water distribution system (MBR downstream), sewage collection & treatment systems
 - A consortium of Mahindra & Mahindra and Larsen & Tubro were appointed as the EPC2 Contractor

- Wrap Around Agreement
 - To complete the split structure, an Umbrella Agreement was required to co-ordinate and “wrap” the obligations of the Contractors to the Project Company
 - The Project Company’s recourse, in the event of a failure in the performance of either of the Contractors, was to be to a single entity (as would have been the case in the traditional EPC Contract form)
 - The O&M Contactor was also included in the Wrap Agreement, providing the Project Company with a single point of responsibility
 - The Wrap Agreement prevented the various Contractors from relying on each other’s defaults to avoid performing their contractual obligations

- The O&M Contract
 - The Mahindra Group and United Utilities International Ltd, UK are jointly and severally acting as the O&M operator

Securing Revenues

- It has been observed that the economic benefits of infrastructure facilities often outweigh the financial returns to an investor
- In order to make an infrastructure project more attractive to the private sector, economic benefits can be captured by way of indirect collections for:
 - Ensuring benchmark returns
 - Providing potential upside to investors
- Indirect Collections may include:
 - Betterment levy
 - Revenue from Concessions for real estate development and other economic activities
 - Access to right of way for advertising etc.



- Examples

- NTBCL

- Land Development Rights have been included in the Concession Agreement for NTBCL
 - NTBCL has 65 acres of land in Delhi and 34 acres of land in NOIDA
 - Owing to the construction on the Bridge, value of this land has increased, making it amenable to commercial development

- East Coast Road

- Revenue from Advertising rights has been allowed in the Concession Agreement for East Coast Road

- New Tirupur Area Development Company Limited (NTADCL)

- The Concession for NTADCL provides for the following outside the regulated return regime:
 - Revenues from Right of Way exploitation for telephone cables, advertising etc.
 - Revenues from the sale of Recycled water





Stage II: Financial Innovation

Subordinated Debt

- Subordinated debt frees regulatory capital, enabling the promoters to take higher exposure in the Projects
- Interested government agency sponsors, that cannot take an equity position for policy reasons, may be able to provide subordinated debt as seed capital to attract senior debt
- Subordinated debt contains a specific schedule for interest and principal matching the cash flow profile of Projects
- Being subordinated in nature, it provides greater comfort to the Lenders
- Examples
 - Ahmedabad – Mehsana Toll Road Project (AMTRL)
 - IL&FS has subscribed to the Subordinated Debt of the Project Company
 - Road Infrastructure Development Company of Rajasthan Limited (RIDCOR)
 - Government of the State of Rajasthan has subscribed to the Subordinated Debt of the Project Company

Private Equity Funding

- Private equity is medium to long-term finance provided in return for an equity stake in potentially high growth unquoted companies
- Example
 - NOIDA Toll Bridge Company Limited (NTBCL)
 - Investment of private equity fund from AIG Sectoral Equity Fund, a unique private equity fund set up by IL&FS for making equity investments in infrastructure projects
 - The AIG fund offered equity fund as a venture capital fund that took the initial risks and bridged the gap in equity financing
 - Tirupur Water Supply Project
 - Asian Infrastructure Development Fund (AIDEC), a Private Equity Fund invested in the Project and brought in international experience and know-how

Deep Discount Bonds

- To match the cash flow profile of the projects and to improve the Debt Servicing
 - Deep Discount Bonds have very low or no coupon and are issued at a discount on the face value and generally issued with call provisions
 - The investor receives a bullet payment on maturity
- Example:
 - NTBCL
 - Part of the Project Cost was funded through issue of Deep Discount Bonds and Fully Convertible Debentures
 - The Securities were issued through an Initial Public Offering
 - The securities were secured through “Take Out Financing”
 - This was successfully completed in October 1999, with an over subscription of nearly Rs 200 million
 - This was the first IPO by a green field infrastructure project